UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/715,171	11/20/2000	Pierre Dupuy	Q61862	6878

23373	7590	03/14/2005

SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER
IQBAL, KHAWAR

ART UNIT	PAPER NUMBER
2686	

DATE MAILED: 03/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	**Applicant(s)**
Office Action Summary	09/715,171	DUPUY, PIERRE
	Examiner	**Art Unit**	
	Khawar Iqbal	2686	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>25 November 2004</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-16</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1.   Claims 1-2,4-7,9-13 and 15 are rejected under 35 U.S.C. 102(e) as being

unpatentable by Kaaresoja (6556573).

2.   Regarding claim 1 Kaaresoja teaches a transmission apparatus comprising

(abstract, figs. 1-6);

        a first relay (15) receiving data messages formatted in a first protocol (PCM: ATM

or internet network) from a transmitter and converting the data messages formatted in

the first protocol into data messages formatted in a second protocol (GSM) (col. 2, line

13-col. 3, line 20, col. 4, lines 11-21, col. 5, lines 48-61, col. 8, lines 2-6, col. 13, lines 2-

27);

        a second relay (14) connected to the first relay and receiving the data messages

formatted in the second protocol from the first relay and transmitting the data messages

formatted in the second protocol in a synchronous mode to a receivers (col. 2, line 13-

col. 3, line 20, col. 4, lines 11-21, col. 5, lines 48-61, col. 6, lines 35-60, col. 8, lines 2-6,

col. 13, lines 2-27);

        transmission channel interconnecting the first and second relays and having a

limited data rate (64 kbit/s between base station and base station controller (MSC))

associated to transmission in circuit mode (col.9, lines 10-19, col. 10, line 60-col.11, line

9), wherein, said data messages formatted in said second protocol include data messages of different lengths (rate modification, col. 4, lines 3-4, col. 6, lines 8-21 and 35-60, col.9, lines 25-62); and

means for transmitting said data messages formatted in said second protocol (1over said transmission channel in an asynchronous mode (col. 2, line 13-col. 3, line 20, col. 5, lines 48-61, col. 6, lines 35-60, col. 8, lines 2-6, col. 13, lines 2-27).

Regarding claim 6 Kaaresoja teaches a transmission method comprising the steps of (abstract, figs. 1-6):

receiving, in a first relay, data messages formatted in a first protocol from a transmitter (col. 2, line 13-col. 3, line 20, col. 5, lines 48-61, col. 6, lines 35-60, col. 8, lines 2-6, col. 13, lines 2-27);

converting the data messages way formatted in the first protocol into data messages formatted in a second protocol (col. 2, lines 56-65, col. 5, lines 48-61, col. 8, lines 2-6, col. 13, lines 2-27);

transmitting the data messages formatted in the second protocol to a second relay connected to the to the first relay by a transmission channel having limited data rate associated transmission in circuit mode (col. 9, lines 10-19, col. 10, line 60-col.11, line 9), wherein said data message formatted in said second protocol include data messages having different lengths, and said data message having different lengths are transmitted over said limited data rate transmission channel in an asynchronous mode (col. 2, line 13-col. 3, line 20, col. 5, lines 48-61, col. 6, lines 35-60, col. 8, lines 2-6, col. 13, lines 2-27); and

transmitting, in a synchronous mode, the data messages formatted in the second

protocol from the second relay to a receiver (mobile station) (col. 2, line 13-col. 3, line

20, col. 5, lines 48-61, col. 6, lines 35-60, col. 8, lines 2-6, col. 13, lines 2-27).

Regarding claims 2,7 Kaaresoja teaches wherein the second relay includes a

buffer memory configured to store the message received from the first relay and then to

transmit the data message to the receiver (col. 8, 45-49).

Regarding claim 4,9,15 Kaaresoja teaches wherein the first protocol has a

plurality of data rates for transmitting payload bits, the rate at which the payload bits are

transmitted over the limited data rate transmission channel being intermediate in value

U between the data rates of the first protocol (col. 9, lines 25-62).

Regarding claim 5,10 Kaaresoja teaches wherein the buffer memory is of the

first-in-first-out type (col. 9, lines 25-62).

Regarding claim 11 Kaaresoja teaches wherein said second relay further

includes a decoder for receiving instructions for controlling said buffer memory, said

decoder determining whether a message is unavailable for transmission during a

following transmission window based reception date of the message (col. 8, lines 21-

50).

3.   Regarding claim 12 Kaaresoja teaches a transmission apparatus comprising

(abstract, figs. 1-6);

a first relay receiving data messages formatted in a first protocol from a

transmitter and converting the data messages formatted in the first protocol into data

messages formatted in a second protocol (col. 2, line 13-col. 3, line 20, col. 5, lines 48-61, col. 8, lines 2-6, col. 13, lines 2-27),

a second relay connected to the first relay and receiving the data messages formatted in the second protocol from the first relay and transmitting the data messages formatted in the second protocol in a synchronous mode to a receivers (col. 2, line 13-col. 3, line 20, col. 5, lines 48-61, col. 8, lines 2-6, col. 13, lines 2-27),

transmission channel interconnecting the first and second relays and having a limited data rate associated transmission in circuit mode (col. 9, lines 10-19, col. 10, line 60-col.11, line 9), wherein, said data messages formatted in said second protocol include data messages of different lengths from a length of a transmission window which would be used for transmission in the synchronous mod over said limited dated rate transmission channel (col. 6, lines 8-21 and 35-60, col.9, lines 25-62); and

means for transmitting said data messages formatted in said second protocol over said transmission channel in an asynchronous mode (col.5, lines 48-61, see above).

Regarding claim 13 Kaaresoja teaches a relay device for transmission apparatus, the relay device comprising:

Means for receiving data messages formatted in first protocol from a transmitted (col. 4 lines 11-18, col. 5, lines 48-61, col. 8, lines 2-6, col. 13, lines 2-27);

Means for converting the data message formatted in the first protocol into data messages formatted in a second protocol (col. 2, line 13-col. 3, line 20, col. 5, lines 48-61, col. 8, lines 2-6, col. 13, lines 2-27); and

Means for transmission the date messages formatted in the second protocol over

a transmission rate channel having a limited data rate associated transmission in circuit

mode, wherein the data message formatted in the second protocol include data

message of different lengths (col.5, lines 48-61, col. 9, lines 10-59, col. 10, line 60-

col.11, line 9).

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

5.   Claims 3,8,14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Kaaresoja (6556573) and further in view of Boetzel (6377541).

Regarding claim16 Kaaresoja teaches a relay device for a transmission

apparatus, the relay device comprising:

means for receiving data messages transmitted in transmission in circuit mode

over a limited data rate transmission channel, wherein the data messages include data

messages of different lengths (col. 4, lines 11-21,col. 6, lines 8-21 and 35-60, col.9,

lines 25-62); a buffer memory configured to store the data messages (col. 8, 45-49, col.

12, lines 7-36). Kaaresoja does not specifically teach a decoder for receiving an

instruction to retransmit the data messages in a synchronous mode to a receiver and for

storing the data messages that are to be retransmitted in the buffer memory.

In an analogous art, Boetzel teaches a decoder for receiving an instruction to retransmit the data messages in a synchronous mode to a receiver and for storing the data messages that are to be retransmitted in the buffer memory (col. 5, lines 12-41). Boetzel also teaches the data to be transferred are preferably read directly prior to their transmission from the cyclical buffer, and are written, together with the indication and error protection data, into a transmitting buffer for their transmission. The data packets which were not transmitted free of errors are preferably transmitted repeatedly. Regarding claims 3,8,14 Boetzel teaches wherein the second relay includes a decoder for receiving an instruction to retransmit a data message and for storing a copy of a data message that is to be retransmitted in the buffer memory (col. 5, lines 12-41). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Kaaresoja by specifically adding feature for storing the data messages that are to be retransmitted in the buffer memory in order to enhance data transfer in the different systems purpose of increasing efficiency as taught by Boetzel.

Response to Arguments

Applicant's arguments filed 11/25/2004 have been fully considered but they are not persuasive. Examiner has thoroughly reviewed applicant's arguments but firmly believes the cited reference to reasonably and properly meets the claimed limitations. Applicant's argument was that "limited data rate associated to transmission on circuit mode". In response, examiner would like to point out that Kaaresoja teaches system enables transmission of speech frames, generated from a PCM-encoded speech signal,

through a **packet network (64 kbit/s** limited data rate between base station and base

station controller), e.g. in Asynchronous Transfer Mode (ATM) or over the Internet. A

speech signal is converted into a parameter group, and then inserted into traffic frames

for transmission as a packet (header and payload). The payload is assembled from

several traffic frames until essentially full. On receipt at the transmission destination,

the speech frames are decoded. The packing of packets may be commenced

approximately one second after establishing the connection and after any incorporated

pauses. Thus the ending of any pause is speedily transmitted to the receiving listener

(abstract, col. 2, line 10-col. 3, line 20, col. 4, lines 1-18). Additionally, the examiner has

given the claim language its broadest reasonable interpretation. Although the claims are

interpreted in light of the specification, limitations from the specification are not read into

the claims. See In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Anticipatory reference need not duplicate, word for word, what is in claims; anticipation

can occur when claimed limitation is "inherent" or otherwise implicit in relevant reference

(Standard Havens products Incorporated v. Gencor Industries Incorporated, 21

USPQ2d 1321).

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to KHAWAR IQBAL whose telephone number is 703-306-

3015.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, **BANKS-HAROLD, MARSHA**, can be reached at 703-305-4379.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2684 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal

Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the Technology Center 2600 Customer Service

Office whose telephone number is (703) 306-0377.

Khawar Iqbal

RAFAEL PEREZ-GUTIERREZ
PATENT EXAMINER
3/11/or